

This listing of claims will replace all prior versions of claims in the application.

Claim 1. (original) A method for inhibiting replication or transcription of a nucleic acid molecule indicative of a disease state, the method comprising:
targeting the nucleic acid molecule with an oligonucleotide; and,
binding of the oligonucleotide to the target nucleic acid molecule; and,
wrapping around the target nucleic acid molecule; thereby,
inhibiting transcription of the target nucleic acid molecule.

Claim 2. (original) The method of claim 1, wherein the oligonucleotide comprises a backbone nucleic acid sequence, an arm nucleic acid sequence.

Claim 3. (original) The method of claim 2, wherein the oligonucleotide comprises a double stranded nucleic acid sequence.

Claim 4. (original) The method of claim 2, wherein the oligonucleotide comprises a single stranded nucleic acid sequence.

Claim 5. (original) The method of claim 2, wherein the backbone and arms are complementary to a target nucleic acid molecule.

Claim 6-14. (cancelled)

Claim 15. (original) The method of claim 2 wherein the oligonucleotide has equal or higher specificity and affinity for a target oligonucleotide sequence than the complementary target oligonucleotide sequence.

Claim 16-40. (cancelled)

Claim 41. (original) A method for selectively treating cells comprising an infectious disease organism, comprising:

administering to the cells an oligonucleotide sequence that is complementary to a target nucleic acid molecule of an infectious disease organism, the cells comprising an oligonucleotide sequence of an infectious disease organism; wherein,

the oligonucleotide wraps around the target nucleic acid molecule; and,
inhibiting transcription of the target nucleic acid molecule.

Claim 42. (original) The method of claim 41, wherein the cells are mammalian or plant cells.

Claim 43. (currently amended) The method of ~~claim 41~~ any one of claims 41 or 42, wherein the cells are infected with a virus bacteria, protozoa or fungi.

Claim 44. (currently amended) The method of ~~any one of claims 41 through 43~~, wherein the cells are in any one of G1, S, M, or G2 stage of a cell cycle.

Claim 45. (currently amended) The method of ~~any one of claims 41 through 43~~, wherein the oligonucleotide binds to a wild type infectious disease organisms' target gene sequence and any alleles or variants thereof.

Claims 46-58. (cancelled)

Claim 59. (original) A method for treating a mammal suffering from or susceptible to an infectious disease or cancer, the method comprising:
administering to the mammal a therapeutically effective amount of an oligonucleotide.

Claim 60. (original) The method of claim 59, wherein the infectious disease is caused by or associated with a virus, bacteria, protozoa or fungi.

Claim 61. (original) The method of claim 59, wherein the infectious agent is present in any tissue or organ of a mammal.

Claim 62. (currently amended) The method of ~~any one of claims 59 through 61~~, wherein the disease or disorder is associated with undesired expression of at least a portion of a sequence identified in tables 1, 2, 4, 5 or 6 above, or variants thereof.

Claim 63. (currently amended) The method of ~~any one of claims 59 through 62~~, wherein the administered oligonucleotide hybridizes with messenger RNA of the gene to inhibit expression thereof.

Claim 64. (original) The method of ~~claim 59 any one of claims 59 through 61~~, wherein administering the oligonucleotide results in inhibition of gene expression.

Claim 65. (currently amended) The method of ~~claim 59 any one of claims 59 through 61~~, wherein the virus is HPV.

Claim 66. (original) The method of claim 65 wherein the oligonucleotide that targets the HPV is identified by SEQ. ID. NO 2.